presence of these teeth, as a striking peculiarity in the missing female. Even had the features of the exhumed female been obliterated by putrefaction, the non-identity would have been established by this medical fact.

"The prisoner was convicted and executed." T. R. B.

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64. *Blake on Poisons.*—The following are extracts from the *Athenæum Report of the Meeting of the British Association* at Southampton, in September last. The discrepancies are certainly extraordinary. It is to be hoped that Dr. Blake will publish his observations *in full.*

Sept. 16. Sect. B. Chemistry.—"On the connection between the isomorphous relations of the elements, and their physiological action," by J. Blake. In a paper read before the Academy of Sciences at Paris, the author remarked, "that when introduced directly into the blood, the salts of the same base appear to exert the same effect on the animal economy." Since that time, further researches have led to the discovery of a law, equally interesting under a chemical as under a physiological point of view. The law alluded to, is, that when introduced into the blood, all isomorphous substances produce analogous effects, and give rise to the same reactions in the animal economy. This law has been verified, by an extended series of experiments with the salts of magnesia, lime, manganese, iron, cobalt, nickel, zinc, cadmium, copper, bismuth, lead, baryta, strontia, soda, silver, potash, ammonia, palladium, platinum, osmium, iridium, antimony, the acids of phosphorus, arsenic, bromine, chlorine, iodine, sulphur, and selenium. One of the facts observed, is, the connexion which exists between the physiological action of these substances, and their isomorphous relations to the elements of the blood. It is found that those substances which exist in the blood, or have isomorphous relations with its elements, have the least marked reactions; thus phosphoric and arsenic acids can be introduced into the veins without producing any marked phenomena, whilst, on the other hand, those elements which are most distinct in an isomorphous point of view, from the constituents of the blood, are those which give rise to the most marked phenomena. *Two drachms of arsenic acid, injected into the veins, will produce no marked effect on any organ,* but a grain of chloride of palladium, or two grains of nitrate of baryta, are sufficient instantly to arrest the movements of the heart. Several other instances, analogous to those quoted, were pointed out.

Sect. E. Physiology.—"On the Physiological Action of Medicines," by Dr. J. Blake. This report was in continuation of the same subject, reported on at previous meetings of the Association, and contained a series of experiments to investigate the action of the salts of iridium and osmium, and of the acids of selenium and sulphur, on the animal economy. The salts of iridium, when injected into the venous system, destroy life by diminishing the force of the heart's action, and when injected into the arterial system, the capillaries are impeded, and the heart's action is much increased, to overcome the resistance. The action of the salts of osmium is exactly analogous to those of iridium, and to that of other members of the same isomorphous group. The effects produced by selenic and sulphuric acids, when introduced into the blood, are not striking, not appearing to act in a manner, on *any one organ.* They agree in this with other bodies which either enter into the composition of the blood, or have isomorphous relations with it. The experiments with these substances were given in detail. In conclusion, the author enumerated the new law in organic chemistry, which he derives from the series of researches which this report concludes, viz., that the reactions which take place between the elements of the living body and inorganic compounds, are not governed by the ordinary chemical properties of these substances, but depend on certain properties they possess connected with their isomorphous relations. This law, he contended, opens up a new point of view, to conduct our organic chemical inquiries from, and satisfactorily accounts for the failure which has constantly attended attempts to explain the chemistry of animal life, by analogy from ordinary chemical phenomena. T. R. B.

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65. *Delirium Tremens in an infant.*—A little boy, five years of age, swallowed by mistake a large quantity of brandy. Vomiting speedily followed, and he passed a restless night, sleeping only toward morning. On awaking, it was observed, that

he had tremors of the hands, and that he could not hold a cup steadily. Convulsions with cramps ensued. The pulse was slow, the look timid, the pupil dilated, and the countenance pale. Delirium supervened, and there was dysuria, with great thirst. A cataplasm was applied to the abdomen, and calomel and jalap were administered. The symptoms abated about the middle of the day, but toward evening, there was a return of the tremors with other nervous symptoms. An opiate was exhibited, from the effects of which, the child slept soundly, and on awaking, the whole of the symptoms had disappeared.—*Ibid.*, from *Gazette des Hopitaux.* T. R. B.

66. *On the Echites suberecta.* By Dr. W. Hamilton.—This plant is a native of Jamaica and Hayti, a shrub, with a weakly twining stem, supporting itself by means of the bushes, to a height of ten or more feet, and showing large golden blossoms in the months of July, August, and September.

The milk of this plant is a most deadly poison, and often fatal to cattle that browse upon it. Lunau states, that he saw two drachms given to a dog, which proved fatal in eight minutes. But its exhibition may be so managed, as to sap the constitution by slow and imperceptible degrees, so as, without awakening suspicion, to accomplish its object with greater certainty. Lunau gives the case of a medical practitioner in Jamaica, who was practised upon in this way by a negro woman, who appears, however, to have used it too largely for concealment, as it produced violent griping, nausea and loss of appetite, followed by convulsive twitchings in various parts of his body, hectic fever, and emaciation. Lunau on being applied to for his advice, sent him some cocoons of the *Feuillea*, which he directed him to take infused in wine, frequently in the course of the day, by which means the deleterious effects of the Echites were counteracted, and health ultimately restored, although it was a long time before the disposition to spasm was wholly subdued.

Dr. Barham gives another remarkable case, in which the effects of this plant were counteracted by the timely exhibition of the expressed juice of the root of the Maranta arundinacea, or arrowroot. It appears that an ignorant negro on a plantation about a league distant from Spanish Town, being at a loss for a cork, employed a piece of the stem of the Echites suberecta, to stop a jar of rum, which was left in that condition, and with some of the leaves which had dropped in, all night. Of this rum, some of the negroes partook in the morning, and were in the course of a few hours, seized with a violent vomiting, and tremors. An alarm was immediately raised that they were poisoned, and the owner of the plantation hastened, accompanied by the surgeon who attended it, to the spot, but on his arrival, he found that some were dead, and another just expiring. Nobody could explain the cause, but somebody present having suggested the arrowroot, it was procured, the juice expressed from the root, and administered with the happiest effects. Immediately after drinking the first glassfull, the negro who was at the point of death revived; the second brought him completely to himself.

Dr. Hamilton suggests the importance of an analysis of this plant.—*Pharmaceutical Journal*, July, 1846. T. R. B.

67. *Vapours of Phosphorus, Lucifer Matches.*—M. Dupasquier, from numerous observations, arrives at the following results.

1. That the vapours of phosphorus do not produce on workmen the serious effects ascribed to them. 2. That they only excite a moderate bronchial irritation which soon yields in consequence of the mucous membrane becoming accustomed to the contact of these vapours.

Such are his conclusions, deduced from observations made at the factories in Lyons. M. Dupasquier does not deny that more serious effects have been noticed in the German factories and in those established in the suburbs of Paris, but he attributes such to other causes than the influence of phosphoric vapours. Possibly they may be owing to the addition of arsenious acid to the phosphoric paste.

In spite of the express directions of the Committee of Health of Paris, not to employ arsenic in the manufacture of Lucifer matches, he has ascertained that the manufacturers use it in the proportion of at least one-fourth of the whole materials employed. A clerk in an extensive druggist establishment at Paris, informed M.